

(FILE 'HOME' ENTERED AT 13:55:18 ON 14 JUL 2003)

FILE 'MEDLINE, BIOTECHDS, EMBASE, CANCERLIT, BIOSIS, CAPLUS' ENTERED AT
13:56:37 ON 14 JUL 2003

L1 584601 S ACRY? OR METHACRY?
L2 16477 S MICROPARTICLE OR DNA VACCINE
L3 984 S L2 AND L1
L4 6 S L3 AND DNA VACCINE
L5 6 DUP REM L4 (0 DUPLICATES REMOVED)
L6 587 S L1 AND ADJUVANT
L7 412 DUP REM L6 (175 DUPLICATES REMOVED)
L8 62304 S MALEIC ANHYDRIDE
L9 18 S L8 AND L7
L10 2155479 S ANTIGE? OR IMMUNOGEN? OR VACCINE
L11 351 S L10 AND L8
L12 42 S L11 AND L1
L13 39 DUP REM L12 (3 DUPLICATES REMOVED)
L14 2 S L8 AND DNA VACCINE
L15 5042298 S DNA OR NUCLEIC OR GENE OR PLASMID
L16 9419 S L15 AND L1
L17 48 S L16 AND L8
L18 46 DUP REM L17 (2 DUPLICATES REMOVED)
L19 302 S L1 AND INTERFERON
L20 46 S L19 AND L10
L21 27 DUP REM L20 (19 DUPLICATES REMOVED)
L22 2340 S AUJESZKY
L23 898 S L22 AND L10
L24 658 S L22 AND VACCINE
L25 172 S L24 AND L15
L26 15 S L25 AND PROTECTIVE
L27 8 DUP REM L26 (7 DUPLICATES REMOVED)
L28 1732 S PORCINE REPRODUCT? AND VIRUS
L29 331 S L28 AND VACCINE
L30 162 S L29 AND PROTE?
L31 162 S L30 AND RESPIRATORY
L32 0 S PORCINE PARVOVIROSIS VIRUS AND VACCINE
L33 0 S PORCINE PARVOVIROSIS VIRUS
L34 893 S PORCINE PARVOVI?
L35 155 S L34 AND VACCINE
L36 8 S L35 AND PROTECTIVE
L37 1180 S HOG CHOLERA VIRUS
L38 19 S L37 AND VACCINE AND PROTECTIVE
L39 12 DUP REM L38 (7 DUPLICATES REMOVED)
L40 10703 S ACTINOBACILLUS
L41 112 S L40 AND VACCINE AND PROTECTIVE
L42 47 S L41 AND ANTIGEN
L43 25 DUP REM L42 (22 DUPLICATES REMOVED)
L44 0 S EQUINE RHINOPNEUMONIA
L45 370 S RHINOPN?
L46 277 S L45 AND EQUINE
L47 43 S L46 AND VACCINE
L48 4 S L47 AND PROTECTIVE
L49 124 S CL TETANI
L50 2 S L49 AND VACCINE AND PROTECTIVE
L51 4 S L49 AND ANTIGEN
L52 0 S ECENPHALITIS AND ANTIGEN
L53 5261 S ENCEPHALITIS AND ANTIGEN
L54 638 S L53 AND VACCINE
L55 177 S L54 AND PROTECTI?
L56 3068 S CANINE DISTEMPER
L57 533 S L56 AND ANTIGEN

L58 49 S L57 AND PROTECT?
 L59 26 DUP REM L58 (23 DUPLICATES REMOVED)
 L60 0 S CANINE CORNOAVIRUS
 L61 1 S CORNOAVIRUS
 L62 9598 S CORN? AND VIRUS
 L63 46 S L62 AND CANINE
 L64 7 S L63 AND VACCINE
 L65 73 S BOVINE PESTIVIRUS
 L66 10 S L65 AND VACCINE
 L67 2 S L66 AND ANTIGEN
 L68 0 S L65 AND IMMUNOGENE
 L69 0 S L65 AND IMMUNOGEN
 L70 12 S L65 AND ANTIGEN
 L71 6 S L65 AND PROTEC?
 L72 343 S PESTIVIRUS AND VACCIN?
 L73 58 S L72 AND ANTIGEN
 L74 5496 S FELINE LEUK? VIRUS
 L75 0 S L74 AND VACCIN AND PROTECTIVE
 L76 163 S L74 AND VACCINE AND ANTIGEN
 L77 27 S L76 AND PROTECTIVE
 L78 16 DUP REM L77 (11 DUPLICATES REMOVED)
 L79 7 S FELINE PANLEUKOPAENIA VIRUS
 L80 0 S L79 AND ANTIGEN
 L81 622 S FELINE AND PANLEU? VIRUS
 L82 27 S L81 AND ANTIGEN AND VACCINE
 L83 17 S FELINE AND PARI? AND VIRUS
 L84 1 S L83 AND VACCINE
 L85 3 S PARITONITIS
 L86 74446 S PARIT?
 L87 921 S L86 AND VIRUS
 L88 1 S L87 AND VACCINE AND ANTIGEN
 L89 0 S PARIT? VIRUS
 L90 40 S TONGUE AND VIRUS AND FELINE
 L91 1 S L90 AND VACCINE
 L92 0 S TONI? VIRUS
 L93 15778 S FELINE AND VIRUS
 L94 40 S L93 AND TONGUE
 L95 1 S L94 AND VACCINE
 L96 25 DUP REM L94 (15 DUPLICATES REMOVED)
 L97 3 S PARITONITIS
 L98 52581 S PERITONITIS
 L99 966 S L98 AND FELINE AND VIRUS
 L100 147 S L99 AND VACCINE
 L101 39 S L100 AND ANTIGEN
 L102 5 S L101 AND PROTECTIVE
 L103 120 S CALIC? VIRUS
 L104 48 S L103 AND FELINE
 L105 33 S L104 AND VACCINE
 L106 9 S L105 AND ANTIGEN
 L107 481 S FIV AND VACCINE
 L108 264 S L107 AND PROTECT?
 L109 142 S GUMBORO AND VIRUS
 L110 45 S L109 AND VACCINE
 L111 1 S LARYNGOTHR? AND VIRUS
 L112 733 S LARY? VIRUS
 L113 219 S L112 AND VACCINE
 L114 5381 S AVIAN LEUKOSIS
 L115 5016 S PNEUMOVIRUS
 L116 18 S AVIAN AND ANAEMIA VIRUS
 L117 6 S L116 AND VACCINE

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L13 ANSWER 25 OF 39 MEDLINE DUPLICATE 2
AN 91363766 MEDLINE
DN 91363766 PubMed ID: 2103830
TI Polymer-metal complexes of protein **antigens**--new highly effective **immunogens**.
AU Mustafaev M I; Norimov A Sh
CS Institute of Immunology, Ministry of Health of the USSR, Moscow.
SO BIOMEDICAL SCIENCE, (1990 Mar) 1 (3) 274-8.
Journal code: 9010320. ISSN: 0955-9701.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199110
ED Entered STN: 19911103
Last Updated on STN: 19970203
Entered Medline: 19911017
AB The mechanism of interaction of the copolymers N-vinylpyrrolidone-**acrylic acid** and N-vinylpyrrolidone-**maleic anhydride** with bovine serum albumin, influenza virus total surface **antigen** (haemagglutinin and neuraminidase), and the BCG protein fraction in the presence of divalent copper ions was investigated. Novel water-soluble triple polymer-metal complexes of the above protein **antigens** were formed. These complexes showed high **immunogenicity** and conferred high levels of immunological protection. Study of the replication of pathogenic influenza A virus in animal lungs showed that, in mice immunised with the triple complex containing surface glycoprotein influenza virus A **antigens**, reproduction of the homologous virus was sharply inhibited, and immunisation of B mice, exhibiting pronounced T-cell deficiency, with complexes containing the BCG protein fraction ensured development of a high level of protection with respect to BCG infection.

L13 ANSWER 19 OF 39 CAPLUS COPYRIGHT 2003 ACS

AN 1994:517757 CAPLUS

DN 121:117757

TI Synthesis of polymer bioactive conjugates

IN Marcucci, Fabrizio; Gregory, Ruth

PA Farmitalia Carlo Erba S.R.L., Italy

SO PCT Int. Appl., 44 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9413322	A1	19940623	WO 1993-EP3429	19931206
	W: AT, AU, BB, BG, BR, BY, CA, CH, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, KZ, LK, LU, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, UA, US, VN				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	CA 2150925	AA	19940623	CA 1993-2150925	19931206
	AU 9456968	A1	19940704	AU 1994-56968	19931206
	AU 678796	B2	19970612		
	EP 675736	A1	19951011	EP 1994-902692	19931206
	EP 675736	B1	19980715		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	JP 08504202	T2	19960507	JP 1993-513763	19931206
	AT 168273	E	19980815	AT 1994-902692	19931206
	ES 2121180	T3	19981116	ES 1994-902692	19931206
	US 6172202	B1	20010109	US 1997-889049	19970707
PRAI	GB 1992-25448	A	19921204		
	WO 1993-EP3429	W	19931206		

AB A process for the prepn. of a conjugate between a polymer and a first substance having a biol. activity mediated by a domain consists of (a) contacting the first substance with a second substance which specifically binds to the domain of the first substance, (b) conjugating a polymer to the first substance having the second substance bound and (c) freeing the second substance from the first substance having the polymer conjugate. The advantages such as prolonged half-life in vivo and reduced **immunogenicity** in proteins, that can be derived from the conjugation of polymers to drugs or diagnostic reagents are maintained. Thus, a PEG_monoclonal antibody conjugates (mAb 78) lyophilized formulation was prep'd. contg. drug 0.05-0.5, excipient such as lactose or mannitol 2.5-5.0, surfactant (e.g., Poloxamer) 0.0025-0.025% (wt./vol.) and 6.5-7 pH-adjusting agent. The conjugate displayed a better retention of biol. activity than the unprotected conjugates.

L18 ANSWER 42 OF 46 CAPLUS COPYRIGHT 2003 ACS

AN 1980:169270 CAPLUS

DN 92:169270

TI Bloodcompatible functional polymers

IN Sullivan, Thomas E.; Wright, Oscar L.

PA USA

SO U.S., 4 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	US 4182750	A	19800108	US 1977-789498	19770421
PRAI	US 1977-789498		19770421		

AB Blood compatible polymers for hemoperfusions were made by chem. bonding a base polymer formed by vinyl polymn. of styrene, vinyl chloride, **maleic anhydride**, **acrylic** acid derivs. or nitrilo substituted ethylene to a modified protein, carbohydrate, **nucleic** acid or a lipid. The polymers are capable of transferring a ingredient to blood, biol. fluid or tissue without producing undesirable side effects.

L18 ANSWER 12 OF 46 CAPLUS COPYRIGHT 2003 ACS

AN 2002:271978 CAPLUS

DN 136:299804

TI High efficiency local drug delivery using polymer-coated catheters

IN Palasis, Maria; Walsh, Kenneth

PA Scimed Life Systems, Inc., USA

SO U.S., 12 pp., Cont.-in-part of U.S. Ser. No. 106,855.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	US 6369039	B1	20020409	US 1998-204254	19981203
PRAI	US 1998-106855	B2	19980630		

AB A method of site-specific delivery of a therapeutic agent to a target location within a body cavity, vasculature or tissue is described. The method comprises the steps of providing a medical device having a substantially satd. soln. of therapeutic agent assocd. therewith; introducing the medical device into the body cavity, vasculature or tissue; releasing a vol. of the soln. of therapeutic agent from the medical device at the target location at a pressure of about 0-5 atm for a time of up to about 5 min; and withdrawing the medical device from the body cavity, vasculature or tissue. In another aspect, the present invention includes a system for delivering a therapeutic agent to a body cavity, vasculature or tissue, comprising a medical device having a substantially satd. soln. of the therapeutic agent assocd. therewith. For example, a delivery with a hydrogel-coated balloon catheter was carried out. Virus was applied to the hydrogel coating of angioplasty balloons by slowly applying 25 L of a 1.7×10^{11} pfu/mL adenoviral .beta.-galactosidase stock soln. (replication deficient adenovirus carrying the E coli .beta.-galactosidase **gene**) onto the coating using a micropipette. A 2.0 cm long, 3.0 mm diam. loaded hydrogel coated balloon catheter was placed within a protective sheath and inflated to 2 atm. The entire assembly was advanced over a 0.014 in guidewire via the right common carotid artery to the bifurcation leading to the external iliacs. The balloon was then deflated and quickly advanced further to either the right or left external iliac artery. Viral delivery was allowed to occur for either 2 or 30 min. A 2-min clin. relevant delivery time was shown to be effective in achieving high levels of **gene** transfection in vivo

L27 ANSWER 1 OF 8 MEDLINE DUPLICATE 1
 AN 1999435201 MEDLINE
 DN 99435201 PubMed ID: 10507367
 TI Enhanced **protective** response and immuno-adjuvant effects of porcine GM-CSF on **DNA** vaccination of pigs against **Aujeszky's** disease virus.
 AU Somasundaram C; Takamatsu H; Andreoni C; Audonnet J C; Fischer L; Lefevre F; Charley B
 CS Virologie et Immunologie moleculaires, INRA, Jouy en Josas, France.
 SO VETERINARY IMMUNOLOGY AND IMMUNOPATHOLOGY, (1999 Sep 20) 70 (3-4) 277-87. Journal code: 8002006. ISSN: 0165-2427.
 CY Netherlands
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 199910
 ED Entered STN: 20000111
 Last Updated on STN: 20000111
 Entered Medline: 19991026
 AB This study was conducted to investigate whether the co-delivery of **DNA** encoding porcine cytokines would enhance a **protective** immune response in pigs to a Pseudorabies virus (PRV; or **Aujeszky's** disease virus) **DNA vaccine**. **Aujeszky's** disease in pigs results in respiratory and nervous symptoms with important economic losses. To evaluate cytokine effects, eukaryotic expression vectors were constructed for porcine GM-CSF, IL-2 and IFN-gamma. cDNA for each of these cytokines was inserted under the control of a CMV promoter in the pcDNA3 **plasmid** and cytokine expression was confirmed after **DNA** transfection in various mammalian cell cultures by bioassays (GM-CSF and IL2) and ELISA (IFN-gamma). Pigs were vaccinated by single intramuscular injection with **plasmid DNA** encoding PRV gB and gD along with various combinations of cytokine **plasmid** constructs. Pig serum was tested for the production of antibody by isotype specific anti-PRV ELISA. Pigs were then challenged with the highly virulent PRV strain NIA3 on day 21 after vaccination. The survival and growth rate of pigs were monitored for seven days after the viral challenge. The co-administration of GM-CSF **plasmid** increased the immune response induced by gB and gD PRV **DNA vaccine**. This immune response was characterized by an earlier appearance of anti-PRV IgG2, a significantly enhanced anti-PRV IgG1 and IgG2 antibody response, a significantly decreased and shortened viral excretion in nasal swabs and an improved protection to the viral challenge. In contrast, the co-administration of porcine IL-2 or IFN-gamma had no adjuvant effects. Our results thus demonstrate for the first time that the application of porcine GM-CSF **gene** in a **DNA vaccine** formulation can exert immuno-adjuvant and **protective** effects with single vaccination in the natural host pig against **Aujeszky's** disease.

L31 ANSWER 1 OF 162 MEDLINE
 AN 2003081173 MEDLINE
 DN 22480811 PubMed ID: 12591204
 TI Comparative safety and efficacy of attenuated single-strain and multi-strain vaccines for **porcine reproductive and respiratory** syndrome.
 AU Mengeling William L; Lager Kelly M; Vorwald Ann C; Clouser Deborah F
 CS Virus and Prion Diseases of Livestock Research Unit, National Animal Disease Center, PO Box 70, USDA, Agricultural Research Service, Ames, IA 50010, USA.. bbmengeling@aol.com
 SO VETERINARY MICROBIOLOGY, (2003 May 2) 93 (1) 25-38.
 Journal code: 7705469. ISSN: 0378-1135.
 CY Netherlands
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 200306
 ED Entered STN: 20030221
 Last Updated on STN: 20030617
 Entered Medline: 20030616
 AB The objective of this study was to compare the efficacy and safety of single-strain and multi-strain vaccines for the prevention of the **respiratory** facet of **porcine reproductive and respiratory** syndrome. The study comprised six groups of pigs (A through F, eight pigs per group). At the beginning of the study (Day 0) Groups C and D were vaccinated with a single-strain **vaccine**, and Groups E and F were vaccinated with a multi-strain **vaccine**. The multi-strain **vaccine** contained five attenuated strains of PRRSV including the strain used as the single-strain **vaccine**. On Day 28 Groups B (nonvaccinated/challenged control), D, and F were challenged with a highly virulent field strain of PRRSV that was unrelated to any of the strains used for vaccination. Group A was kept as a nonvaccinated/nonchallenged control. On Day 42 all pigs were necropsied. Their lungs and lymph nodes were examined for **virus**-induced changes. Serum samples obtained at weekly intervals during the study and lung lavage fluids obtained at necropsy were tested for the presence and titer of PRRSV. Serum samples were also tested for antibody. The presence and severity of clinical signs and lesions were the primary means by which **vaccine** efficacy and safety were evaluated. Both vaccines provided a high level of **protective** immunity to challenge. However, appreciable lymph node enlargement in pigs vaccinated with multi-strain **vaccine**, with or without subsequent challenge, raised a question as to its safety. Collectively these results indicate that both single-strain and multi-strain attenuated PRRSV vaccines can be effective immunogens, but additional studies in regard to safety are needed before multi-strain vaccines can be recommended for routine field use.
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L36 ANSWER 5 OF 8 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

AN 1990:421725 BIOSIS

DN BA90:82526

TI DEVELOPMENT OF A **VACCINE** PREVENTING PARVOVIRUS-INDUCED
REPRODUCTIVE FAILURE IN PIGS.

AU PYE D; BATES J; EDWARDS S J; HOLLINGWORTH J

CS COMMONWEALTH SERUM LAB., 45 POPLAR RD., PARKVILLE, VICTORIA 3052.

SO AUST VET J, (1990) 67 (5), 179-182.

CODEN: AUVJA2. ISSN: 0005-0423.

FS BA; OLD

LA English

AB An inactivated **porcine parvovirus** (PPV)

vaccine for the prevention of PPV-induced reproductive failure in pigs was developed, using virus grown in cell culture, inactivated with beta-propiolactone and adjuvanted with aluminium hydroxide. The **vaccine** was tested for safety by subcutaneous injection into pregnant gilts. There were no signs of abnormal reactions nor evidence of PPV infection in the gilts or their foetuses when they were sacrificed 6 weeks after vaccination. To demonstrate that the **vaccine** was immunogenic, pigs were immunized either once or twice with 4 weeks between doses. Resulting antibody titres (haemagglutination inhibition - HAI) ranged from <8 to 64 (geometric mean of 30) after one dose of **vaccine**, and from 128 to 512 (geometric mean 256) after two doses. To demonstrate that the **vaccine** was **protective**, antibody-negative gilts were vaccinated twice, with 4 weeks between doses, joined after the second dose, and were then infected with virulent PPV 40 to 50 days after joining. In litters from 10 vaccinated gilts, none of 93 foetuses showed evidence of PPV infection. In contrast, in litters from two unvaccinated gilts, all 13 foetuses showed evidence of PPV infection and 10 of these were mummified. The average number of live piglets per litter was 9.2 from vaccinated gilts and 1.5 from unvaccinated gilts. The **vaccine** was therefore considered to be effective in preventing PPV reproductive failure in susceptible gilts.

L39 ANSWER 12 OF 12 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT AND ISI
AN 1991-02567 BIOTECHDS
TI Structural proteins of **hog cholera virus**
expressed by vaccinia virus: further characterization and induction of
protective immunity;
pig cholera virus structural protein expression in CV-1 cell culture;
potential application to recombinant **vaccine** production
AU Ruemenapf T; Stark R; Meyers G; *Thiel H J
LO Federal Research Centre for Virus Diseases of Animals, P.O. Box 1149,
D-7400 Tuebingen, Germany.
SO J.Virol.; (1991) 65, 2, 589-97
CODEN: JOVIAM
DT Journal
LA English
AB Expression and immunization studies using recombinant vaccinia virus
(VV)/pig cholera virus (PCV) constructs (plasmid pGS62core and plasmid
pGS62-3.8) that contained different cDNA fragments covering the coding
regions for the structural proteins of PCV are presented. cDNA encoding
the PCV proteins was inserted into a thymidine-kinase (EC-2.7.1.21) gene
of VV. Expression led to the identification of PCV-specific proteins.
The putative PCV core protein p23 was demonstrated using an antiserum
against a bacterial fusion protein. The glycoproteins expressed by VV/PCV
recombinants migrated on SDS gels identically to those precipitated from
PCV-infected cells. A disulfide-linked heterodimer between gp55 and
gp33, previously detected in PCV-infected cells, was also demonstrated
after infection with the recombinant VV. The VV system allowed the
identification of a disulfide-linked homodimer of PCV gp55. The VV/PCV
recombinant that expressed all 4 structural proteins (VAC3.8) induced
virus-neutralizing antibodies in mice and pigs. Immunization of pigs with
this recombinant virus resulted in full protection against a lethal
challenge with PCV. (43 ref)

L43 ANSWER 7 OF 25 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.DUPLICATE 2

AN 2000175283 EMBASE

TI Intramuscular immunization with genetically inactivated (ghosts)
Actinobacillus pleuropneumoniae serotype 9 protects pigs against
homologous aerosol challenge and prevents carrier state.

AU Hensel A.; Huter V.; Katinger A.; Raza P.; Strnistschie C.; Roesler U.;
Brand E.; Lubitz W.

CS A. Hensel, Inst. Animal Hygiene/Vet Public Hlth, Veterinary Faculty,
University of Leipzig, D-04103 Leipzig, Germany. hensel@vetmed.uni-
leipzig.de

SO Vaccine, (1 Jul 2000) 18/26 (2945-2955).

Refs: 50

ISSN: 0264-410X CODEN: VACCDE

PUI S 0264-410X(00)00107-9

CY United Kingdom

DT Journal; Article

FS 026 Immunology, Serology and Transplantation

037 Drug Literature Index

004 Microbiology

LA English

SL English

AB Bacterial ghosts are empty cell envelopes achieved by the expression of a
cloned bacteriophage lysis gene and, unlike classical bacterins, suffer no
denaturing steps during their production. These properties may lead to a
superior presentation of surface antigens to the immune system. Currently
available porcine **Actinobacillus pleuropneumoniae** vaccines
afford only minimal protection by decreasing mortality but not morbidity.
Pigs which survive infection can still be carriers of the pathogen, so a
herd once infected remains infected. Carrier pigs harbour A.
pleuropneumoniae in their nasal cavities, in their tonsils, or within lung
lesions. A dose-defined nose-only aerosol infection model for pigs was
used to study the immunogenic and **protective** potential of
systemic immunization with ghosts made from A. pleuropneumoniae serotype 9
reference strain CVI 13261 against an homologous aerogenous challenge.
Pigs were vaccinated twice intramuscularly with a dose of 5x10⁹ CFU ghosts
(GVPs) or formalin-inactivated A. pleuropneumoniae bacterins (BVPs). After
2 weeks vaccinated pigs and non-vaccinated placebo controls (PCs) were
challenged with a dose of 10⁹ CFU by aerosol. The **protective**
efficacy of immunization was evaluated by clinical, bacteriological,
serological and post-mortem examinations. Bronchoalveolar lavage in pigs
was performed during the experiment to obtain lavage samples (BALF) for
assessment of local antibodies. Isotype-specific antibody responses in
serum and BALF were determined by ELISAs based on whole-cell
antigen. Immunization with ghosts did not cause clinical
side-effects. After aerosol challenge PCs developed fever and
pleuropneumonia. GVPs or BVPs were found to be fully protected against
clinical disease or lung lesions in both vaccination groups, whereas
colonization of the respiratory tract with A. pleuropneumoniae was only
prevented in GVPs. Specific immunoglobins against A. pleuropneumoniae were
not detectable in BALF after immunization. A significant systemic increase
of IgM, IgA, IgG(Fc'), or IgG(H+L) antibodies reactive with A.
pleuropneumoniae was measured in GVPs and BVPs when compared to the
non-exposed controls. BVPs reached higher titers of IgG(Fc') and IgG(H+L)
than GVPs. However, prevention of carrier state in GVPs coincided with a
significant increase of serum IgA when compared to BVPs. These results
suggest that immunization with ghosts, that bias antibody populations
specific to non-denaturated surface antigens, may be more efficacious in
protecting pigs against colonization and infection than bacterins.
Copyright (C) 2000 Elsevier Science Ltd.

L48 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2003 ACS
 AN 1998:124035 CAPLUS
 DN 128:191573
 TI Cross-~~protective~~ **equine** herpesvirus preparations and
 method of making and using the same
 IN Macek, Joseph; Brown, Karen K.; Moore, Bobby O.
 PA Bayer Corporation, USA
 SO PCT Int. Appl., 26 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9806427	A2	19980219	WO 1997-US14840	19970805
	W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
	AU 9748912	A1	19980306	AU 1997-48912	19970805
	AU 714418	B2	20000106		
	EP 929315	A2	19990721	EP 1997-911582	19970805
	R:	AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL			
	BR 9711138	A	19990817	BR 1997-11138	19970805
	CN 1228029	A	19990908	CN 1997-197316	19970805
	NZ 334154	A	20000728	NZ 1997-334154	19970805
	JP 2000516622	T2	20001212	JP 1998-510119	19970805
	EP 978286	A1	20000209	EP 1998-114863	19980807
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
PRAI	US 1996-698630	A	19960816		
	WO 1997-US14840	W	19970805		
AB	Disclosed herein is an EHV-1 vaccine which provides protection against diseases assocd. with EHV-1 and EHV-4. The EHV-1 antigen is prepd. from equine dermal or kidney or fetal lung cell line, and is inactivated by .beta. propiolactone or formalin or binary ethylenimine. The vaccine compn. also comprises immune adjuvant (e.g. Havlogen, Carbopol 934P, Polygen, block copolymer, polymer, oil, aluminum salt, cytokine, immunomodulator, etc.) and stabilizer. The vaccine is useful for preventing equine abortion or respiratory disease e.g. rhinopneumonitis .				

L51 ANSWER 3 OF 4 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.

AN 75190077 EMBASE

DN 1975190077

TI The relation between the rabbit potency test and the response of sheep to sheep clostridial vaccines.

AU Frerichs G.N.; Gray A.K.

CS Cent. Veter. Lab., New Haw/Weybridge, United Kingdom

SO Research in Veterinary Science, (1975) 18/1 (70-75).

CODEN: RVTSA

DT Journal

FS 037 Drug Literature Index

004 Microbiology

LA English

AB Six commercially available clostridial vaccines comprising 1 oil emulsion, 2 alum precipitated and 3 aluminium hydroxide adjuvanted preparations, each containing between 2 and 7 antigenic components, were administered to groups of 10 rabbits and 8 sheep in accordance with manufacturers' recommendations. Serum antitoxic values to *Cl welchii* .beta., *Cl welchii* .epsilon., *Cl septicum*, *Cl oedematiens* and ***Cl tetani*** toxins were determined 14 days after completion of each vaccination course. The overall pattern of mean antitoxic values was found to be similar in sheep and rabbits, a vaccine eliciting a comparatively high antibody titer to any given **antigen** component in sheep also inducing a comparatively high titer in the corresponding group of rabbits. Similarly, comparatively poor responses in sheep were associated with poor responses in rabbits. The degree of variation in response within groups of animals was greater in sheep than in rabbits for all 5 antigenic components assayed. Sheep consistently developed higher titers than rabbits to *Cl oedematiens* component but consistently lower titers to both *Cl welchii* .beta. and .epsilon. components irrespective of the type of vaccine used. The response of both species to ***Cl tetani*** **antigen** was similar in terms of serum antitoxic values. It was concluded that rabbits provide a suitable model for the assessment of potency of sheep clostridial vaccines.

L59 ANSWER 24 OF 26 MEDLINE DUPLICATE 10

AN 86200399 MEDLINE

DN 86200399 PubMed ID: 3754590

TI **Protection** against **canine distemper** virus in
dogs after immunization with isolated fusion protein.

AU Norrby E; Utter G; Orvell C; Appel M J

SO JOURNAL OF VIROLOGY, (1986 May) 58 (2) 536-41.

Journal code: 0113724. ISSN: 0022-538X.

CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 198605

ED Entered STN: 19900321

Last Updated on STN: 19970203

Entered Medline: 19860527

AB **Canine distemper** virus attachment (hemagglutinin [H] equivalent) and fusion (F) antigens were purified by affinity chromatography with monoclonal antibodies. The purified antigens were used to immunize groups of three dogs. Radioimmune precipitation assays with sera from these animals showed that the F **antigen** preparation was pure and induced only an F polypeptide-specific antibody response but that the H **antigen** preparation had a slight contamination by the F **antigen**. Immunized animals were challenged with virulent **canine distemper** virus. Two animals in each group developed pronounced humoral and cellular immune responses after challenge. Among these infected animals, only the dogs immunized with H **antigen** developed symptoms, albeit mild. In contrast, three nonimmunized control animals developed severe disease, with a fatal outcome in two cases. The complete resistance against challenge in two dogs was interpreted to reflect in one case anti-F immunity and in the other case most likely a high level of anti-H immunity. It is suggested that the F **antigen** may be of particular interest for the development of morbillivirus and possibly other paramyxovirus subunit or synthetic vaccines, because it can induce immunity capable of blocking virus infection and in situations of virus replication prevent the emergence of symptoms.

L59 ANSWER 25 OF 26 MEDLINE DUPLICATE 11

L64 ANSWER 3 OF 7 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT AND ISI
AN 1993-03824 BIOTECHDS
TI Dog distemper **virus vaccine**;
comprises immunogen from **virus**-infected CCL-64 mink lung
CCL-64 cell culture in serum-free culture medium
PA Parhelion
PI US 5178862 12 Jan 1993
AI US 1989-444545 1 Dec 1989
PRAI US 1989-444525 1 Dec 1989
DT Patent
LA English
OS WPI: 1993-044797 [05]
AB Vaccines against **canine** distemper **virus** (CDV)
comprise CDV immunogens isolated from CDV-infected cells cultured in
vitro, and an adjuvant. The immunogens are obtained by culturing
CDV-infected CCL-64 mink lung cells (ATCC CRL 9891) in a serum-containing
culture medium, transferring the cells to a serum-free culture medium,
freeze-thawing the culture supernatant, and inactivating any residual
virus with 1 mM binary ethylene imine at 4 deg. The adjuvant in
a oil-in-water, Al(OH)₃, Quil A, dimethyldioctadecyl ammonium bromide,
TDA-squalene, lecithin, alum and/or saponin. Unlike live or modified
live vaccines, the present **virus**-free vaccines do not produce
CDV carriers and can be combined with other vaccines, e.g. against parvo
virus, **corona virus**, adeno **virus** and
parainfluenza **virus**. (7pp)

L73 ANSWER 6 OF 58 MEDLINE
 AN 97354709 MEDLINE
 DN 97354709 PubMed ID: 9210936
 TI Identification and production of **pestivirus** proteins for diagnostic and **vaccination** purposes.
 AU Lecomte C; Vandenberg D; Vanderheijden N; De Moerlooze L; Pin J J; Chappuis G; Desmettre P; Renard A
 CS Eurogentec Campus du Sart Tilman Liege, Belgium.
 SO ARCHIVES OF VIROLOGY. SUPPLEMENTUM, (1991) 3 149-56.
 Journal code: 9214275. ISSN: 0939-1983.
 CY Austria
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 199707
 ED Entered STN: 19970805
 Last Updated on STN: 19970805
 Entered Medline: 19970724
 AB Using a panel of monoclonal antibodies (MAbs) previously characterized by seroneutralization, immunofluorescence and radioimmunoprecipitation, we have identified **Pestivirus** proteins useful for diagnostic purposes from the cytopathic Osloss isolate of bovine viral diarrhea virus (BVDV). Proteins that should be useful for **vaccination** have also been analysed. Cell-free translation of RNA from glycoprotein-coding cDNA fragments produced, when synthesized in the presence of canine pancreatic microsomes, two glycosylated proteins that were independently recognized and immunoprecipitated by two distinct classes of neutralizing MAbs. A similar in vitro procedure was carried out on nonstructural protein-coding sequences and allowed to identify a viral translation product that specifically reacted with MAbs directed against the 80 kDA protein of a number of **Pestivirus** strains. Its positioning within the polyprotein encoded by the viral genome was refined by epitope scanning using synthetic hexameric peptides. This viral **antigen** was further expressed in E. coli, produced as inclusion bodies and used successfully as an ELISA **antigen** in both competitive and indirect assays for the detection of BVD antibodies in cattle sera.

L73 ANSWER 2 OF 58 MEDLINE
 AN 2001092240 MEDLINE
 DN 20564807 PubMed ID: 11112498
 TI Recombinant bovine adenovirus type 3 expressing bovine viral diarrhea virus glycoprotein E2 induces an immune response in cotton rats.
 AU Baxi M K; Deregt D; Robertson J; Babiuk L A; Schlapp T; Tikoo S K
 CS Virology Group, Veterinary Infectious Disease Organization, Saskatoon, Saskatchewan, S7N 5E3, Canada.
 SO VIROLOGY, (2000 Dec 5) 278 (1) 234-43.
 Journal code: 0110674. ISSN: 0042-6822.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 200101
 ED Entered STN: 20010322
 Last Updated on STN: 20010322
 Entered Medline: 20010125
 AB Recombinant bovine adenovirus is being developed as a live vector for animal **vaccination** and for human gene therapy. In this study, two replication-competent bovine adenovirus 3 (BAV-3) recombinants (BAV331 and BAV338) expressing bovine viral diarrhea virus (BVDV) glycoprotein E2 in the early region 3 (E3) of BAV-3 were constructed. Recombinant BAV331 contains chemically synthesized E2 gene (nucleotides modified to remove internal cryptic splice sites) under the control of BAV-3 E3/major late promoter (MLP), while recombinant BAV338 contains original E2 gene under the control of human cytomegalovirus immediate early promoter. Since E2, a class I membrane glycoprotein, does not contain its own signal peptide sequence at the 5' end, the bovine herpesvirus 1 (BHV-1) glycoprotein D signal sequence was fused in frame to the E2 open reading frame (ORF) for proper processing of the E2 glycoprotein in both the recombinant viruses. Recombinant E2 protein expressed by BAV331 and BAV338 recombinant viruses was recognized by E2-specific monoclonal antibodies as a 53-kDa protein, which also formed dimer with an apparent molecular weight of 94 kDa. Insertion of an E2-expression cassette in the E3 region did not effect the replication of recombinant BAV-3s. Intranasal immunization of cotton rats with these recombinant viruses generated E2-specific IgA and IgG responses at the mucosal surfaces and in the serum. In summary, these results show that the **pestivirus** glycoprotein can be expressed efficiently by BAV-3. In addition, mucosal immunization with replication-competent recombinant bovine adenovirus 3 can induce a specific immune response against the expressed **antigen**.
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and against parasites, i.e., Trypanosoma cruzi, in mice.

L78 ANSWER 11 OF 16 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AN 1989:437987 BIOSIS
DN BR37:82596
TI **PROTECTIVE VACCINE AGAINST FELINE
LEUKEMIA VIRUS USING A RECOMBINANT ANTIGEN.**
AU KENSIL C R; BELTZ G A; HUNG C H; AUBERT A; MARCIANI D J
CS CAMBRIDGE BIOSCI. CORP., WORCESTER, MASS., USA.
SO MORISSET, R. A. (ED.). VE CONFERENCE INTERNATIONALE SUR LE SIDA: LE DEFI
SCIENTIFIQUE ET SOCIAL; V INTERNATIONAL CONFERENCE ON AIDS: THE SCIENTIFIC
AND SOCIAL CHALLENGE; MONTREAL, QUEBEC, CANADA, JUNE 4-9, 1989. 1262P.
INTERNATIONAL DEVELOPMENT RESEARCH CENTRE: OTTAWA, ONTARIO, CANADA. ILLUS.
PAPER. (1989) 0 (0), 542.
ISBN: 0-662-56670-X.
DT Conference
FS BR; OLD
LA English

L78 ANSWER 9 OF 16 MEDLINE DUPLICATE 5

AN 91281123 MEDLINE

DN 91281123 PubMed ID: 1647576

TI Genetically-engineered subunit **vaccine** against **feline leukaemia virus: protective** immune response in cats.

AU Marciani D J; Kensil C R; Beltz G A; Hung C H; Cronier J; Aubert A

CS Cambridge Biotech Corporation, Worcester, MA 10605.

SO VACCINE, (1991 Feb) 9 (2) 89-96.

Journal code: 8406899. ISSN: 0264-410X.

CY ENGLAND: United Kingdom

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 199107

ED Entered STN: 19910818

Last Updated on STN: 19970203

Entered Medline: 19910730

AB A recombinant retroviral subunit **vaccine** has been developed that successfully protects cats from infectious **feline leukaemia virus** (FeLV) challenge. The **antigen** used is a non-glycosylated protein derived from the envelope glycoprotein of FeLV subgroup A, expressed in Escherichia coli. This recombinant protein, rgp70D, includes the entire exterior envelope protein gp70, plus the first 34 amino acids from the transmembrane protein p15E. The **vaccine** consists of purified rgp70D absorbed on to aluminium hydroxide and used in conjunction with a novel saponin adjuvant. Cats immunized with this formulation developed a strong humoral immune response, including neutralizing and feline oncornavirus-associated cell membrane **antigen** antibodies. Vaccinated animals showed an anamnestic response upon intraperitoneal challenge with FeLV-A, and were protected from viral infection. In contrast, the control animals developed viraemia shortly after the challenge, which in most cases became chronic. Formulation of the same **antigen** with other widely used adjuvants elicited poor **protective** immune responses in cats.

(36pp)

L82 ANSWER 8 OF 27 EMBASE COPYRIGHT 2003 ELSEVIER SCI. B.V.
AN 96124404 EMBASE
DN 1996124404
TI Raccoon poxvirus **feline panleukopenia virus**
VP2 recombinant protects cats against FPV challenge.
AU Hu L.; Esposito J.J.; Scott F.W.
CS Cornell Feline Health Center, Dept. of Microbiology/Immunology, Cornell
University Ithaca, Ithaca, NY 14853, United States
SO Virology, (1996) 218/1 (248-252).
ISSN: 0042-6822 CODEN: VIRLAX
CY United States
DT Journal; Article
FS 004 Microbiology
026 Immunology, Serology and Transplantation
037 Drug Literature Index
LA English
SL English
AB An infectious raccoon poxvirus (RCNV) was used to express the
feline panleukopenia virus (FPV) open reading
frame VP2. The recombinant, RCNV/FPV, was constructed by homologous
recombination with a chimeric plasmid for inserting the expression
cassette into the thymidine kinase (TK) locus of RCNV. Expression of the
VP2 DNA was regulated by the vaccinia virus late promoter P11. Southern
blot and polymerase chain reaction (PCR) analyses confirmed the cassette
was in the TK gene of the RCNV genome. An immunofluorescent antibody assay
using **feline** anti-FPV polyclonal serum showed the expressed
viral **antigen** in the cytoplasm of infected cells.
Radioimmunoprecipitation with the same antiserum detected a 67-kDa VP2
protein which exactly matched the migration of the authentic FPV VP2
protein by SDS-polyacrylamide gel electrophoresis. Nine five-month-old
cats were vaccinated and 21 days later were boosted with the recombinant
virus. Peroral FPV challenge 2 weeks after the booster showed that the
cats were fully protected as measured by examining clinical signs and
total white blood cell counts in peripheral blood. Cats not immunized
developed low to very low leukocyte counts following peroral FPV
challenge. The nine vaccinated cats showed high FPV neutralization
antibody prior to challenge, whereas nonvaccinated cats formed anti-FPV
antibodies only after challenge.

L102 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2003 ACS

AN 1994:321355 CAPLUS

DN 120:321355

TI Vector vaccines based on **feline** herpesvirus

IN Sondermeijer, Paulus Jacobus Antonius; Willemse, Martha Jacoba

PA AKZO N. V., Neth.

SO PCT Int. Appl., 56 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9403621	A1	19940217	WO 1993-EP1971	19930723
	W: AU, CA, HU, JP, NZ, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9347022	A1	19940303	AU 1993-47022	19930723
	EP 606452	A1	19940720	EP 1993-917639	19930723
	EP 606452	B1	20021113		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	JP 06511392	T2	19941222	JP 1993-504958	19930723
	AT 227775	E	20021115	AT 1993-917639	19930723
	US 6521236	B1	20030218	US 1995-504617	19950720
PRAI	EP 1992-202365	A	19920730		
	WO 1993-EP1971	W	19930723		
	US 1994-211150	B1	19940322		

AB **Feline** herpesvirus (FHV) with an expression cassette for a heterologous gene introduced into a section of the FHV genome are constructed for use as vector vaccines for cats. The **vaccine** raises immunity to FHV and to the **antigen** encoded by the heterologous gene. A .beta.-galactosidase gene was introduced into the unique short site of the genome of the **vaccine** strain G2620 by in vivo recombination. Specific pathogen-free cats inoculated with one of these viruses (105 TCID50) showed weaker clin. signs post-vaccination than did those inoculated with G2620 (1.7 vs. 7.0). The clin. score of animals challenged with 105 TCID50 of the SGE strain was 12.0 for the novel **virus**, 5.5 for G2620, and 79.7 for control animals.

L102 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2003 ACS

AN 1997:457171 CAPLUS

DN 127:80165

TI **Feline herpes virus** type 1-based expression vectors
for use in vaccines against **feline infectious**
peritonitis

IN Audonnet, Jean-Christophe Francis; Baudu, Philippe Guy Nicolas; Riviere,
Michel Albert Emile

PA Rhone Merieux, Fr.; Audonnet, Jean-Christophe Francis; Baudu, Philippe Guy
Nicolas; Riviere, Michel Albert Emile

SO PCT Int. Appl., 60 pp.

CODEN: PIXXD2

DT Patent

LA French

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	---	-----	-----	-----
PI	WO 9720059	A1	19970605	WO 1996-FR1830	19961119
	W: AU, BR, CA, JP, NZ, US				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	FR 2741806	A1	19970606	FR 1995-14450	19951130
	FR 2741806	B1	19980220		
	CA 2239072	AA	19970605	CA 1996-2239072	19961119
	AU 9676301	A1	19970619	AU 1996-76301	19961119
	AU 725846	B2	20001019		
	EP 870046	A1	19981014	EP 1996-939150	19961119
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE				
	BR 9611845	A	19990309	BR 1996-11845	19961119
	JP 2000501927	T2	20000222	JP 1997-520224	19961119
	NZ 322526	A	20000728	NZ 1996-322526	19961119
	ZA 9609951	A	19980527	ZA 1996-9951	19961127
	US 6074649	A	20000613	US 1998-80044	19980515
	US 6387376	B1	20020514	US 2000-531857	20000321
PRAI	FR 1995-14450	A	19951130		
	WO 1996-1830	A1	19961119		
	WO 1996-FR1830	W	19961119		
	US 1998-80044	A3	19980515		

AB **Feline herpes virus** 1 (FHV-1) expression vectors for
use in vaccines have the gene for the **protective antigen**
inserted into sites in open reading frames ORF5 or ORF2. Multivalent
vaccines using these constructs are described. Extended sequences from
FHV-1 are also reported. The M, S (spike protein), and N genes of
feline infectious peritonitis virus were
placed under control of the human cytomegalovirus immediate-early promoter
and introduced into FHV-1 by in vivo recombination.

L106 ANSWER 8 OF 9 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT AND ISI

AN 1994-04432 BIOTECHDS

TI **Feline** herpes virus mutant containing a foreign gene in the FHV genome;

cat herpes virus mutant expressing cat leukemia virus, FIV virus, cat **calici virus**, cat parvo virus, cat corona virus or cat Chlamydia **antigen**; viral rhinotracheitis recombinant **vaccine**

PA Akzo

PI WO 9403621 17 Feb 1994

AI WO 1993-EP1971 23 Jul 1993

PRAI EP 1992-202365 30 Jul 1992

DT Patent

LA English

OS WPI: 1994-065709 [08]

AB A cat herpes virus (FHV) containing an insertion mutation in part (I) of the FHV genome (restriction map disclosed) spanning the upstream non-coding region of open reading frame (ORF)-1 to the downstream non-coding region of ORF-6 is claimed. (I) (DNA sequence disclosed) encodes specific proteins, whose protein sequences are disclosed, or their variants. Preferably the mutation is insertion of a foreign DNA sequence encoding a cat pathogen (cat leukemia virus, FIV virus, cat **calici virus**, cat parvo virus, cat corona virus or cat Chlamydia) **antigen**. The insertion may be at a deleted part of the FHV genome. Also claimed are: (1) a nucleic acid sequence comprising the foreign DNA insert flanked by DNA sequences derived from the FHV genome; (2) the DNA sequence of (I); (3) a host cell transfected with (I); (4) a cell culture infected with an FHV mutant; (5) a recombinant **vaccine** comprising an FHV mutant; and (6) a method for immunization of animals against an infectious disease involving administering the **vaccine** of (5). (55pp)

L106 ANSWER 6 OF 9 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT AND ISI

AN 1997-08971 BIOTECHDS

TI Live recombinant **vaccine** based on **feline** herpes virus
with **antigen**-encoding sequence inserted;
cat infectious-peritonitis virus, cat leukemia virus, FIV virus, cat
infectious-panleucopaenia virus or **calici virus**
recombinant **antigen** gene cloning in cat herpes virus vector

AU Audonnet J C F; Baudu P G N; Riviere M A E

PA Rhone-Merieux

LO Lyon, France.

PI WO 9720059 5 Jun 1997

AI WO 1996-FR1830 19 Nov 1996

PRAI FR 1995-14450 30 Nov 1995

DT Patent

LA French

OS WPI: 1997-310613 [28]

AB A live recombinant **vaccine** (I) comprises as a vector a cat
herpes virus (FHV) type 1 containing at least 1 sequence (II) encoding a
protein inserted into the open reading frames (ORF) 5 and/or 2. Also new
are: multivalent vaccines containing at least 2 (I) containing different
(II); and a 8,193 bp DNA fragment of FHV-1 CO (reproduced with the
peptide sequences encoded by ORF 1-8) and parts of it. (I) and the
polyvalent vaccines are used to protect cats, specifically against cat
infectious-peritonitis virus (FIPV). (I) is attenuated but retains a
good capacity to replicate in vivo and still protects against
infectious-rhinotracheitis virus (caused by FHV). Vaccines are
administered by the oronasal route, once at a dose of 100-10 million
DICC50. (II) is inserted into ORF 5 or ORF 2 either directly or after
deletion of (part of) the ORF. (II), which is an **antigen** from
a cat pathogen, especially FIPV, leukemia virus, FIV virus, infectious
panleucopaenia virus or a calici virus is expressed under the control of a
strong prokaryotic promoter, particularly the human or mouse cytomegalo
virus immediate early promoter. (60pp)

L117 ANSWER 4 OF 6 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
AN 2001:262417 BIOSIS
DN PREV200100262417
TI **Avian** recombinant live **vaccine** using, as vector, the
avian infectious laryngotracheitis virus.
AU Audonnet, Jean-Christophe (1); Bublot, Michel; Riviere, Michel
CS (1) Lyons France
ASSIGNEE: Merial, Lyons, France
PI US 6153199 November 28, 2000
SO Official Gazette of the United States Patent and Trademark Office Patents,
(Nov. 28, 2000) Vol. 1240, No. 4, pp. No Pagination. e-file.
ISSN: 0098-1133.
DT Patent
LA English
AB The living recombinant **avian vaccine** comprises, as a
vector, an ILTV virus comprising and expressing at least one heterologous
nucleotide sequence, this nucleotide sequence being inserted in the
insertion locus defined between the nucleotides 1624 and 3606 at the SEQ
ID NO: 5. The **vaccine** may in particular comprise a sequence
coding for an antigen of an **avian** pathogenic agent selected
among the group consisting of the Newcastle disease virus (NDV), the
infectious bursal virus (IBDV), the Marek disease virus (MDV), the
infectious bronchitis virus (IBV), the chicken **anaemia**
virus (CAV), the chicken pneumovirus, preferably under
the control of a strong eukaryotic promoter. A multivalent **vaccine**
formula is also disclosed.